CONTRACT

between

SEVIER RIVER WATER USERS ASSOCIATION

and

UTAH STATE UNIVERSITY
LOGAN, UTAH

This Contract made this 18th day of November, 1999, by and between Sevier River Water Users Association, 800 West 100 North, Delta, Utah 84624, (hereinafter referred to as Contractor's Name) and Utah State University, Logan, Utah 84322 (hereinafter referred to as USU).

WITNESSETH THAT:

WHEREAS, Sevier River Water Users Association desires to enter into an contract for USU to perform that work hereinafter set forth; and

WHEREAS, USU is authorized to enter into contracts for the performance of work hereinafter set forth; and

NOW THEREFORE, in consideration of the promises hereinafter set forth it is hereby mutually agreed as follows:

ARTICLE I. STATEMENT OF WORK:

Under a contract between the U.S. Commerce Department and the Sevier River Water Users Association entitled, ***"Telecommunications and Information Infrastructure Assistance,"***USU has been approved for a sole source subcontract to make the following contributions to the project:

1. The development and implementation of a comprehensive water rights allocation program utilizing a real-time interpretation of river and canal flows being monitored throughout the basin;
2. The development and implementation of a water right accounting program for each right along the river, excluding the San Pitch River which is adjudicated separately; and
3. The development and implementation of river operations model.

USU will conduct a project is titled ***"Sevier River Basin Water Resource Management Network"*** and perform the work outlined in Exhibit "A".

ARTICLE II. CONTRACT PERIOD:

Performance under this Contract shall commence on the 1st day of December, 1999 and will expire on the 30th day of September, 2002. The period of the contract may be extended by mutual agreement in writing signed by both parties.

ARTICLE III. PAYMENT FOR SERVICES:

For acceptable performance of the work described in Article I hereof, USU shall be paid a Total Cost Reimburseable amount of $75,000.00. Unless disputed in good faith, payment shall be made within 30 days after receipt of an invoice specifying the appropriate dates and total amount due, to whom the said check should be made, and the address for sending the said check.

ARTICLE IV. KEY PERSONNEL:

Dr. Wynn R. Walker, is designated as Project Director and shall have overall responsibility for the direction of the work performed under the Contract. Any changes of key personnel shall require prior approval.

ARTICLE V. MATCH:

USU agrees to provide matching consideration in an amount not less than $75,000.00, for the time period December 1, 1999 through September 30, 2002.

ARTICLE VI. LIABILITIES:

USU agrees to assume liability for the negligent acts or omissions of its employees committed during the performance of this Contract to the extent such negligence gives rise to liability pursuant to the provisions of the Governmental Immunity Act, Section 63-30-10, et seq. Utah Code Annotated, 1953, and subject to the limitation of liability established in Section 63-30-10 et seq. Utah Code Annotated, 1953.

Sevier River Water Users Assocation agrees to assume liability for the negligent acts or omissions of its employees arising out of Sevier River Water Users Assocation performance under the Contract.

ARTICLE VII. DISPUTE RESOLUTION:

A. If any dispute arises under this Agreement, the parties agree to resolve the dispute in good faith as follows:

   A. First, by informal negotiation.

   B. If informal negotiation fails to resolve the dispute, the parties agree to submit the dispute to a single mediator, mutually agreed upon by the parties, for mediation.

B. Any dispute regarding or arising under this Agreement that cannot be resolved as stated above will be subject to and resolved in accordance with the laws of the State of Utah.

C. It is agreed by the parties that venue for any alternative dispute resolution proceeding to enforce or interpret this Agreement will be conducted in Logan, Utah.

ARTICLE VIII. INFORMATION AND TECHNOLOGY:

The subcontractor agrees that each item of hardware, software, and firmware used under this subcontract shall be able to accurately process date data (including, but not limited to, calculating, comparing and sequencing) from, into and between the twentieth and twenty-first centuries, and the Year 1999 and the Year 2000 and leap-year calculations.

ARTICLE IX. DEBARMENT AND SUSPENSION:

The Subcontractor certifies that it is not debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by an Federal department or agency in accordance with Executive Order 12549, Debarment and Suspension, 43 CFR Part 12, Section 12.510, Participants' responsibilities.

ARTICLE X. TERMINATION:

This Contract may be terminated by either party and will be considered terminated upon receipt in writing of such intent. Upon termination, USU shall immediately turn over to Contractor's Name any information and/or data gathered in a suitable form such that the information can be identified and used.

ARTICLE XI. FULL AND COMPLETE CONTRACT:

This Contract, together with any and all attachments herein incorporated by reference constitutes the full and complete understanding of the parties regarding the subject matter hereof. No modification or alteration of or addition to this Contract shall be effective to bind the parties hereto unless it shall be in writing signed by the parties or their authorized representatives.

IN WITNESS WHEREOF, we have hereunto set our hand the day and year first above written.

SEVIER RIVER WATER USERS ASSOCATION

by_____
Kurt N. Sorenson
President

UTAH STATE UNIVERSITY

by_____
Wynn R. Walker, Ph.D.
Project Director

by_____
Douglas P. Ringle
Contract Administrator

Project Summary:

This project will provide real-time water rights computation and allocation in the Sevier River Basin that will: (1) improve the economy of the Sevier River Basin by enhancing natural resource management; (2) improve public safety by providing more timely emergency information.

Background and Justification:

Even after more than a century, water users in the Sevier River Basin of central Utah, both individual irrigation companies and local communities, remain entirely dependent on controlling, diverting, and using water from the river. River flows are not now, nor have ever been, sufficient for all local needs. As a result, an exhaustive system of water right allocations have evolved to divide water resources equitably. Unfortunately, until the recent advent of electronic data acquisition systems, individual users could not determine how much water that they had either used or had remaining for almost 45 days after water had flowed to and past their diversion works. This lack of real-time information has continually resulted in either conservative cropping with its subsequent over-application of water or excessive use at the expense of downstream users, that of course, resulted in conflict.

Under a grant from the U.S. Department of Commerce program, ***"Telecommunications and Information Infrastructure Assistance,"*** the Sevier Waters Users Association in Piute, Millard, Garfield, Juab, and Sevier Counties will extend and existing water management network to all major river gauging stations canal diversions, and reservoirs. In addition, the network of climatological stations in the basins will be integrated with the water management network. Data from the combined network will be recorded at a local website for use by individual irrigators, irrigation companies, and state and federal water agency personnel.

Although helpful, such data is not necessarily information. By itself, data from the network is not sufficient for the increased demands for improved water management and public safety. Water users also need access to day by day water right allocations and real-time water right accounting.

Previous and On-Going Work

As can be seen from the references presented below, much of the research to solve this problem has been accomplished. Key software to accomplish the necessary expansion of the existing system has been developed for other purposes and can be modified and integrated with the existing system.

Walker Wynn. R. and W. Roger Walker. 1975. Analysis of Water Rights in the Sevier River Basin, Part I: Zone A, Sections A. Consolidated Sevier Bridge Reservoir Company, Delta, Utah.

Walker Wynn. R. and W. Roger Walker. 1976. Analysis of Water Rights in the Sevier River Basin, Part II: Zone B Primary. Consolidated Sevier Bridge Reservoir Company, Delta, Utah.

Walker Wynn. R. and W. Roger Walker. 1977. Analysis of Water Rights in the Sevier River Basin, Part III: Reservoif Operations. Consolidated Sevier Bridge Reservoir Company, Delta, Utah.

Walker, Wynn R. 1992. Technical Appendix: Sevier River Water Allocation Model – Section A Primary. Utah State University, Biological and Irrigation Engineering Department. Prepared for U.S. Bureau of Reclamation and Utah State Engineers Office.

Walker, Wynn R. 1994. Technical Appendix: Sevier River Water Allocation Model – Zone B. Primary. Utah State University, Biological and Irrigation Engineering Department. Prepared for U.S. Bureau of Reclamation and Utah State Engineers Office.

Objectives:

The specific objectives of this project are:

1. to develop and implement a comprehensive water rights allocation program utilizing a real-time interpretation of river and canal flows being monitored throughout the basin;
2. to develop and implement a water right accounting program for each right along the river, excluding the San Pitch River which is adjudicated separately; and
3. to develop and implement a internet-based reference for the water users in the Sevier River Basin.

Procedures and Methods:

Water rights in the Sevier River Basin are defined on daily flows, diversions, and storage accumulations. The conceptual framework for programming the procedures utilized by the Sevier River Commissioners has already been developed as described in the reference citations above. Part of this framework has been programmed and is now used by the Commissions to compute primary rights and their allocation to right classes defined in the river's adjudication. The storage rights and individual right accounting have not been implemented.

Under this phase of the project, the investigators anticipate accomplishing three tasks:

1. Conversion of the existing MSDOS code to 32-bit Windows application programming;
2. Write new code for the river operations that are not now implemented in the basin;
3. Replacing the existing manual data input with a direct data acquisition interface from the real-time field sites; and
4. Expand the existing internet home pages to include real-time water right allocation and accounting.

In order for the water users in the Sevier River Basin to make full use of the water management network, the investigators will develop a detailed on-line reference describing the historical and operational context of each water right, how it is determined, and what day to day variations in the local river flows mean to the right holders. This reference material will be written in the format of a standard context sensitive help system, thus allowing users to investigate not only the specifics of their rights but the overall water management policies that operate the river.